Monthly Status Briefing

August 2009

A Partnership for Safe Chemical Weapons Destruction

Project Background

- **The Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) will safely destroy 2,611 tons of mustard agent in mortar rounds and artillery projectiles stored at the U.S. Army Pueblo Chemical Depot.**
- **Neutralization followed by biotreatment is the technology selected by the Department of Defense to destroy the Pueblo chemical weapons stockpile.**
- **The Program Manager, Assembled Chemical Weapons Alternatives (ACWA), headquartered at Aberdeen Proving Ground, Maryland is responsible for managing all aspects of the safe and environmentally sound destruction of the chemical weapons stockpiles in both Colorado and Kentucky.**
- **The Bechtel Pueblo Team, a partnership of Bechtel National, Inc.; Washington Demilitarization Company/URS; Parsons; and Battelle Memorial Institute, is the systems contractor selected to design, build, systemize, pilot test, operate and close PCAPP.**

Staffing

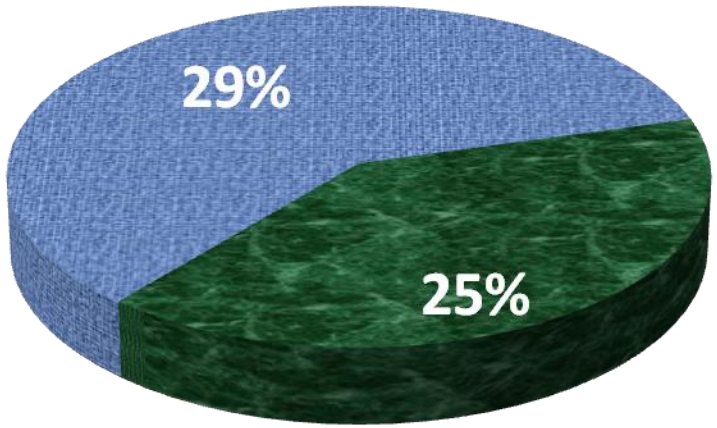
- **Bechtel Pueblo Team non-manual: 302**
  - Pueblo – 294 (100 local hires)
  - Other locations – 8
- **Construction Workers:**
  - Bechtel direct hire – 224
  - Subcontractor personnel – 57

Subcontract Awards

Inception to date, as of July 31

Total Awards in Millions

Awards to Pueblo County and Colorado Businesses



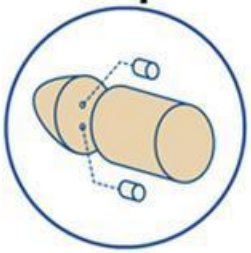
Acquisition Awards Status

FY 2009 Upcoming Request for Proposals:

- **Subcontracts**
  - Piping Equipment and Heat Tracing
  - General Painting
  - Modular Medical Facility
- **Materials**
  - Misc. Construction & Architectural Materials
  - Gypsum Drywall
  - Belt Conveyers
  - Pumps
  - Pipe Supports

Destruction Technology

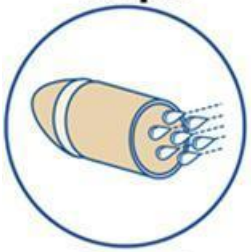
Step 1



REMOVAL OF ENERGETICS

Robotic equipment removes energetics (explosives) from the weapon. The energetics will be disposed of at a permitted facility off site.

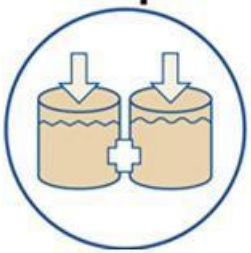
Step 2



REMOVAL OF MUSTARD AGENT

The inside of the weapon is remotely accessed, and mustard agent is washed out with high-pressure water.

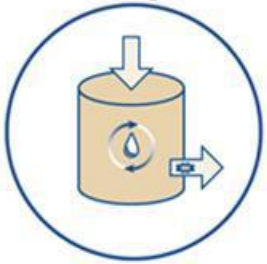
Step 3



NEUTRALIZATION OF MUSTARD AGENT

The mustard agent is neutralized with caustic solution and hot water. The byproduct is called hydrolysate.

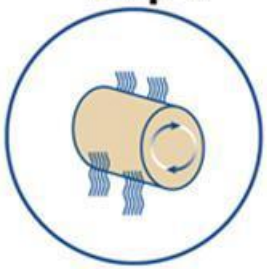
Step 4



BIOTREATMENT

The hydrolysate is treated with microbes that break down the solution into water and biosludge. Water is recycled in the plant, and biosludge is shipped for disposal at a permitted facility.

Step 5



DISPOSAL OF METAL PARTS

Metal parts are heated to 1,000 degrees Fahrenheit for 15 minutes and can then be recycled.

Neutralization followed by biotreatment will be used to destroy the Colorado chemical weapons stockpile.

Construction Status - Complete

- **Multipurpose building**
- **Energetics service magazine corridor foundation**
- **Underground infrastructure** (utilities)
- **Switch gear foundation pads**
- **Utility building structure**
- **Agent filtration area, filtration stack and pipe rack foundations**
- **Automated guided vehicle corridor** – foundation, curbs/piers, structural steel
- **Tank foundations**

Construction Status – In Progress

- **Agent Processing Building** – misc. platform erection, siding, roofing, HVAC, cable tray, fire protection, process piping, electrical and mechanical equipment, interior masonry walls
- **Enhanced Reconfiguration Building** – structural, misc. steel, explosion containment room wall rebar and formwork, munitions service magazine corridor
- **Utility building/boiler houses** – cable tray, HVAC, electrical equipment, piping and structural steel
- **Control Support Building/Entry Control Facility** - excavation, rebar, formwork, and underground utilities
- **Field erected tanks** – hydrolysate, brine tanks and coatings
- **Pipe rack** – vertical construction, pipe and cable tray
- **Biotreatment area –** pipe rack and brine tank containment walls
- **Biotreatment electrical building** – underground electrical conduit

PCAPP Site Overview

Northwestern Corner - Observation Point

1. **Pipe Rack**
2. **Agent Processing Building**
3. **Automated Guided Vehicle Corridor**
4. **Enhanced Reconfiguration Building**

Agent Processing Building

Mustard agent will be destroyed in the neutralization bay.

Enhanced Reconfiguration Building

Rebar and formwork are in place for the walls of the explosion containment rooms.

Automated Guided Vehicle corridor

Munitions will travel from the Enhanced Reconfiguration Building to the Agent Processing Building via this corridor.

Pipe Rack

The pipe rack serves as a background for the reverse osmosis tank, which will store water used to wash out the munitions.

Biotreatment Area

With it's many field erected tanks, construction progress continues in the biotreatment area.

Linear Projectile/Mortar Disassembly (LPMD) system

The LPMD system is currently being tested at the Anniston Chemical Agent Disposal Facility. Similar systems will be used to dismantle munitions at PCAPP.

Change of Command

Lt. Col. Robert Wittig, the U.S. Army Pueblo Chemical Depot's new commander, receives the depot colors from Mr. Conrad Whyne, director of the Army's Chemical Materials Agency, at the July 21 change of command ceremony in Pueblo. At right is former depot commander, Lt. Col. Chris Chesney, Whyne, and Wittig.

Pueblo Chemical Agent-Destruction Pilot Plant

PCAPP Site Plan

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